

Two Years of DG Application Data Tracking through March 2006

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For the DG Collaborative under contract to MTC

Overview

The Distribution Companies in April 2006 submitted updated data tracking spreadsheets with project information from April 1, 2004 through March 31, 2006. The spreadsheets that contain project by project information are posted on the DG Collaborative website.¹ The summary statistics and analysis in this report are based on all data collected from April 1, 2004 through March 31, 2006 and include those projects removed from the spreadsheets posted online. This report completes the two year data tracking process agreed upon by the DG Collaborative in March 2003 and ordered by the Department of Telecommunications and Energy in February 2004 (D.T.E. 02-38-B).

DG Data Tracking Census

From the second quarter of 2004 through the first quarter of 2006, 332 projects have been assigned a statewide tracking number. The Data Tracking Census for all Massachusetts Distribution Companies is reported in Table 1. Table 2 presents the applications sorted by review process for each Distribution Company. The information in Tables 1 through 6 were calculated from the data tracking spreadsheets completed by each Distribution Company. Tables 1 and 2 through 5 are repeated for each Distribution Company at the end of this attachment.

The average sizes for the Simplified, Expedited and Standard Process applications submitted are 2.9, 109 and 1,125 kW, respectively. The majority of the DG applications (179 applications or 54%) are located in NSTAR Electric and Gas Corporation's ("NSTAR") service area, followed by 97 applications or 29% in National Grid's ("NGRID") service area. Western Massachusetts Electric Company ("WMECo") has received 51 applications and Fitchburg Gas and Electric Light Company ("FG&E") has received five.

Solar projects account for 75% of all applications with a median size of 2.5 kW and an average size of 7.0 kW. Because nearly all solar facilities are less than 10 kW, 229 of the 248 solar-powered applications are reviewed in the Simplified Process. Facilities that employ natural gas were the next largest fuel source class. These applications span a large size range, from 1.0 kW for micro-combined heat and power systems to 10,000 kW for a synchronous gas turbine.

¹ The spreadsheets are available at: <http://masstech.org/dg/ma-data.htm>. These spreadsheets do not include projects that applicants requested be removed from the database.

Table 1. Aggregate DG Data Tracking Census for the period Q2 2004 through Q1 2006 for all DG applications submitted to the Distribution Companies.

Type of Review				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
SIM	238	687	234	676
EXP	43	4,685	30	4,120
STD	47	52,885	12	15,406
Total	328	58,257	276	20,202

Generator Type				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
INV	259	1,770	243	949
IND	56	15,781	27	4,852
SYN	17	42,091	6	14,401

Application Initially Complete?		
	Yes	No
SIM	219	19
EXP / STD	47	43

Review Fees and Costs*		
	Customer	Utility
SIM	N/A	\$ 16,650
EXP	\$ 17,745	\$ 7,050
STD	\$ 30,465	\$ 4,450
* Review Fees and Costs are only for the review of screens in the SIM and EXP Processes or the		

Fuel Source				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
SOLAR	248	1,746	233	925
WIND	12	11,102	5	681
HYDRO	3	910	0	0
DIESEL	2	2,460	0	0
NG	58	29,554	36	13,735
OIL	0	0	0	0
COAL	1	4,000	1	4,000
BIODIESEL	2	80	0	0
BIOMASS	1	40	0	0
LANDFILL G	4	8,890	0	0
DIGEST G	0	0	0	0
ETHANOL	0	0	0	0
OTHER	1	861	1	861

Prime Mover				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
PV	248	1,746	233	925
IC ENG	61	20,080	32	4,791
MICRO TUR	0	0	0	0
GAS TUR	4	15,690	2	3,690
FUEL CELL	1	4	1	4
WIND TUR	12	11,102	5	681
STEAM TUR	3	10,111	3	10,111
OTHER	3	910	0	0

Total Fees and Costs		
	Customer	Utility
SIM	N/A	\$ 30,300
EXP	\$ 7,230	\$ 17,391
STD	\$ 25,352	\$ 26,725

Service Type				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
RADL	331	59,640	276	20,202
SPOT	0	0	0	0
AREA	1	3	0	0

Table 2. DG Data Tracking for the period Q2 2004 through Q1 2006 for all DG applications submitted to the Distribution Companies.

		FG&E		NGRID		NSTAR		WMECO		Aggregated	
		Count	kW	Count	kW	Count	kW	Count	kW	Count	kW
Simplified Process	Applications	4	11	64	211	127	345	43	120	238	687
	Approved	4	11	64	211	126	343	40	112	234	677
	Rejected	0	0	0	0	1	3	0	0	1	3
	Withdrawn	0	0	0	0	0	0	0	0	0	0
Expedited Process	Applications	1	60	16	635	22	3,824	4	166	43	4,685
	Approved	0	0	13	568	15	3,432	2	120	30	4,120
	Rejected	0	0	0	0	0	0	0	0	0	0
	Withdrawn	0	0	0	0	0	0	0	0	0	0
Standard Process	Applications	0	0	13	19,804	30	17,520	4	15,561	47	52,885
	Approved	0	0	3	4,290	7	6,255	2	4,861	12	15,406
	Rejected	0	0	0	0	0	0	0	0	0	0
	Withdrawn	0	0	0	0	1	460	0	0	1	460
All Processes	Applications	5	71	93	20,649	179	21,689	51	15,847	328	58,256
	Approved	4	11	80	5,069	148	10,030	44	5,093	276	20,203
	Rejected	0	0	0	0	1	3	0	0	1	3
	Withdrawn	0	0	0	0	1	460	0	0	1	460

To illustrate when Massachusetts DG applications were received and approved from April 1, 2004 through March 31, 2006, Figures 1 and 2 have been prepared. These charts demonstrate that the Distribution Companies have approved a high percentage of projects; however, in terms of

kilowatts of projects, many remain in the Interconnection Process. The number (kilowatts) of applications at any time in the Interconnection Process is the difference between the number (kilowatts) of applications received and approved at a specific time.

Figure 1. Cumulative applications received and approved.

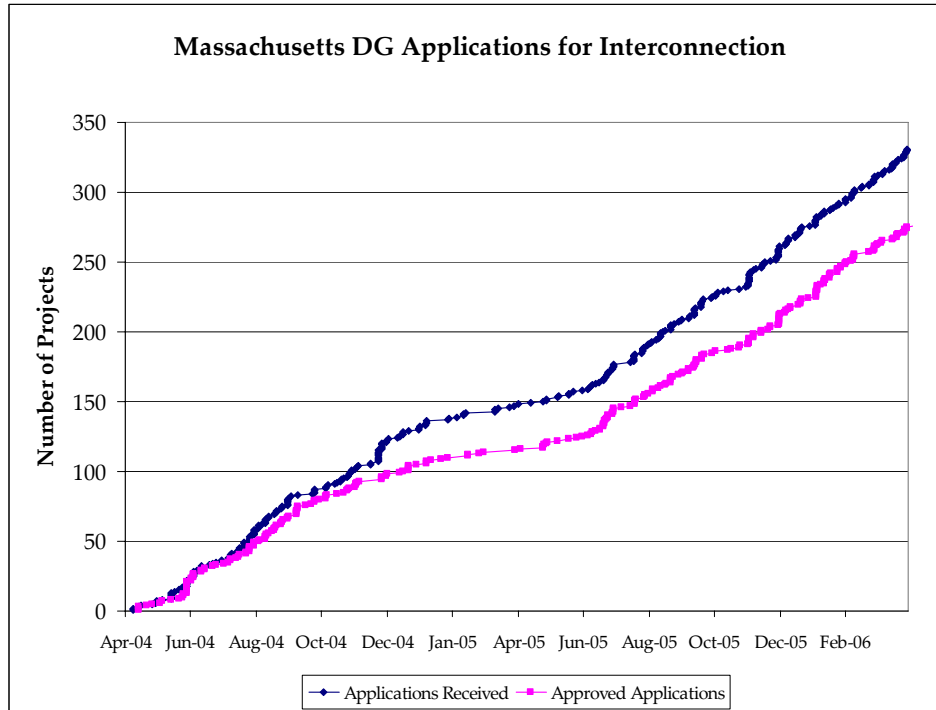
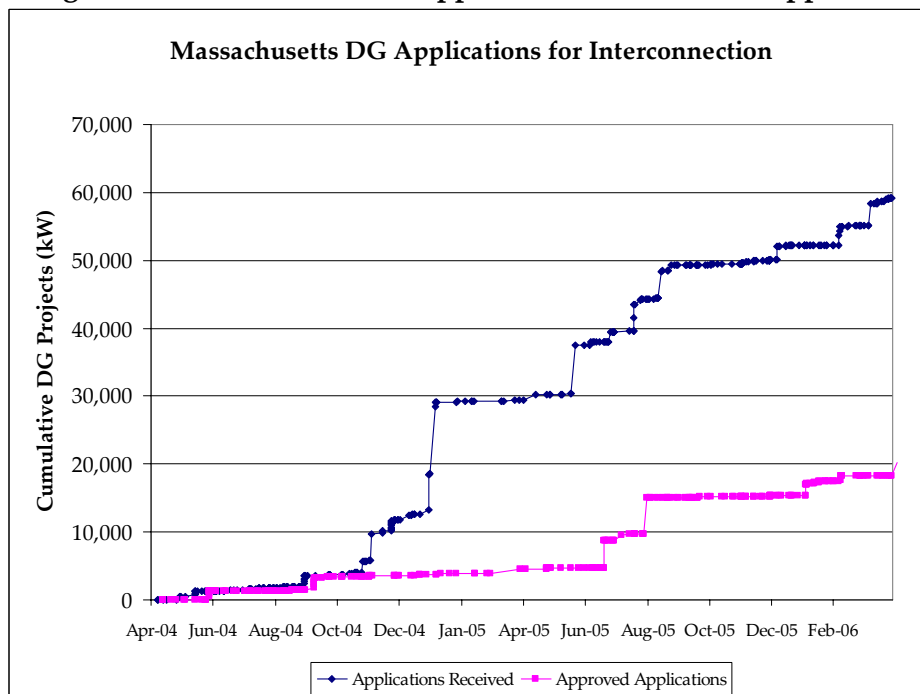


Figure 2. Cumulative kW of applications received and approved.



Analysis of the Interconnection Process

In addition to the census information above, the DG application data is collected to examine the timelines for the Interconnection Process. Tables 3 and 4 provide the data used for this examination. Each step and its associated time for completion are reported in Table 3. Table 4 reports the number of applications used to calculate that average days for a step in the Interconnection Process as the, “number of projects reaching step.” Table 4 also reports the number of projects meeting each step of the interconnection timeline as specified in the Interconnection Tariff and the current status of the applications received. Table 5 reports the application information appearing in Table 4 in terms of kilowatts.

Table 3. Presents the average number of business days for all applications that have finished a step of the Interconnection Process. The data is aggregated for all Massachusetts Distribution Companies through Q1 2006. This average can be compared to the timeframes specified in the Tariff in the columns “Maximum Days.” The number of projects included in the average is specified in Table 4.

	Maximum Days Specified in Interconnection Tariff					Average Days				
	SIMPLIFIED	EXPEDITED		STANDARD		SIMPLIFIED	EXPEDITED		STANDARD	
	Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited	Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
Acknowledge Receipt of Application	3	3	3	3	3	1.6	2.5	0.0	2.9	---
Review Application for Completeness	10	10	10	10	10	1.8	7.9	0.0	7.7	---
Complete Review of All Screens	10	25	25	N / A	25	0.5	15.4	46.0	N / A	---
Complete Supplemental Review (if needed)	N / A	N / A	20	N / A	20	N / A	N / A	0.0	N / A	---
Complete Standard Process Initial Review	N / A	N / A	N / A	20	20	N / A	N / A	N / A	13.1	---
Send Follow-on Studies Cost/Agreement	N / A	N / A	N / A	5	5	N / A	N / A	N / A	12.3	---
Complete Impact Study (if needed)	N / A	N / A	N / A	55	55	N / A	N / A	N / A	64.5	---
Complete Detailed Study (if needed)	N / A	N / A	N / A	30	30	N / A	N / A	N / A	0.0	---
Send Executable Agreement	DONE	10	10	15	15	DONE	16.4	0.0	41.6	---
Total Maximum Days	15	40	60	125	150	2.3	35.9	46.0	80.1	---

Table 4. The number of projects that met the timeframes specified in the Interconnection Tariff for each step and the number of projects finishing each step of the Interconnection Process. The data is aggregated for all Massachusetts Distribution Companies through Q1 2006.

		Number of Projects Meeting Timeline					Number of Projects Reaching Step				
		SIMPLIFIED	EXPEDITED		STANDARD		SIMPLIFIED	EXPEDITED		STANDARD	
		Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited	Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
1	Acknowledge Receipt of Application	207	30	1	35	0	238	42	1	45	0
2	Review Application for Completeness	227	34	1	31	0	238	42	1	42	0
3	Complete Review of All Screens	234	29	0	N / A	0	235	35	1	N / A	0
4	Complete Supplemental Review (if needed)	N / A	N / A	1	N / A	0	N / A	N / A	1	N / A	0
5	Complete Standard Process Initial Review	N / A	N / A	N / A	24	0	N / A	N / A	N / A	32	0
6	Send Follow-on Studies Cost/Agreement	N / A	N / A	N / A	3	0	N / A	N / A	N / A	8	0
7	Complete Impact Study (if needed)	N / A	N / A	N / A	1	0	N / A	N / A	N / A	4	0
8	Complete Detailed Study (if needed)	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
9	Send Executable Agreement	DONE	20	1	6	0	DONE	29	1	12	0
10	Total Maximum Days	226	21	1	7	0	235	29	1	12	0

Table 5. The kilowatts of projects that met the timelines outlined in the Interconnection Tariff for each step and the kilowatts of projects finishing each step of the Interconnection Process. The data is aggregated for all Massachusetts Distribution Companies through Q1 2006.

		Kilowatts of Projects Meeting Timeline					Kilowatts of Projects Reaching Step				
		SIMPLIFIED	EXPEDITED		STANDARD		SIMPLIFIED	EXPEDITED		STANDARD	
		Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited	Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
1	Acknowledge Receipt of Application	598	2,869	225	45,070	0	684	4,460	225	52,585	0
2	Review Application for Completeness	644	3,948	225	38,789	0	684	4,460	225	47,325	0
3	Complete Review of All Screens	675	3,811	0	N / A	0	679	4,226	225	N / A	0
4	Complete Supplemental Review (if needed)	N / A	N / A	225	N / A	0	N / A	N / A	225	N / A	0
5	Complete Standard Process Initial Review	N / A	N / A	N / A	19,165	0	N / A	N / A	N / A	32,360	0
6	Send Follow-on Studies Cost/Agreement	N / A	N / A	N / A	8,000	0	N / A	N / A	N / A	16,960	0
7	Complete Impact Study (if needed)	N / A	N / A	N / A	2,000	0	N / A	N / A	N / A	11,365	0
8	Complete Detailed Study (if needed)	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
9	Send Executable Agreement	DONE	3,282	225	9,520	0	DONE	3,895	225	15,406	0
10	Total Maximum Days	642	3,336	225	6,981	0	679	3,895	225	15,406	0

Table 6. The percent of applications meeting the timelines specified in the tariff (Table 3). The percent is reported based on both the number of projects (Table 4) and the kilowatts of projects (Table 5).

		Percent of Projects Meeting Timeline					Percent of Projects (kW) Meeting Timeline				
		SIMPLIFIED	EXPEDITED		STANDARD		SIMPLIFIED	EXPEDITED		STANDARD	
		Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited	Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
1	Acknowledge Receipt of Application	87%	71%	100%	78%	---	87%	64%	100%	86%	---
2	Review Application for Completeness	95%	81%	100%	74%	---	94%	89%	100%	82%	---
3	Complete Review of All Screens	100%	83%	0%	N / A	---	99%	90%	0%	N / A	---
4	Complete Supplemental Review (if needed)	N / A	N / A	100%	N / A	---	N / A	N / A	100%	N / A	---
5	Complete Standard Process Initial Review	N / A	N / A	N / A	75%	---	N / A	N / A	N / A	59%	---
6	Send Follow-on Studies Cost/Agreement	N / A	N / A	N / A	38%	---	N / A	N / A	N / A	47%	---
7	Complete Impact Study (if needed)	N / A	N / A	N / A	25%	---	N / A	N / A	N / A	18%	---
8	Complete Detailed Study (if needed)	N / A	N / A	N / A	---	---	N / A	N / A	N / A	---	---
9	Send Executable Agreement	DONE	69%	100%	50%	---	DONE	84%	100%	62%	---
10	Total Maximum Days	96%	72%	100%	58%	---	95%	86%	100%	45%	---

The average days reported in Table 3 is for only those projects completing the particular step of the review process. For example, for Step 1 of the Expedited Process 42 applications completed this step, and the average of 2.5 days is based on these 42 applications, while 29 projects passed through to Step 10, and the average of 35.9 days is based on these 29 projects.

The following Table 7 elaborates on the information presented above, and indicates the types of applications and the steps for which the timelines were met more or less often.

Table 7. Projects meeting and not meeting the timelines specified in the tariff.

Aggregate MA DG Application Data Tracking: Q2 2004 to Q1 2006

	Number of Projects NOT Meeting Timeline					Kilowatts of Projects NOT Meeting Timeline				
	SIMPLIFIED	EXPEDITED		STANDARD		SIMPLIFIED	EXPEDITED		STANDARD	
	Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited	Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
1 Acknowledge Receipt of Application	31	12	0	10	0	86	1,590	0	7,515	0
2 Review Application for Completeness	11	8	0	11	0	39	512	0	8,536	0
3 Complete Review of All Screens	1	6	1	N / A	0	4	415	225	N / A	0
4 Complete Supplemental Review (if needed)	N / A	N / A	0	N / A	0	N / A	N / A	0	N / A	0
5 Complete Standard Process Initial Review	N / A	N / A	N / A	8	0	N / A	N / A	N / A	13,195	0
6 Send Follow-on Studies Cost/Agreement	N / A	N / A	N / A	5	0	N / A	N / A	N / A	8,960	0
7 Complete Impact Study (if needed)	N / A	N / A	N / A	3	0	N / A	N / A	N / A	9,365	0
8 Complete Detailed Study (if needed)	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
9 Send Executable Agreement	DONE	9	0	6	0	DONE	613	0	5,886	0
10 Total Maximum Days	9	8	0	5	0	37	559	0	8,425	0

Aggregate MA DG Application Data Tracking: Q2 2004 to Q1 2006

	Percent of Projects Meeting Timeline					Percent of Projects (kW) Meeting Timeline				
	SIMPLIFIED	EXPEDITED		STANDARD		SIMPLIFIED	EXPEDITED		STANDARD	
	Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited	Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
1 Acknowledge Receipt of Application	87%	71%	100%	78%	---	87%	64%	100%	86%	---
2 Review Application for Completeness	95%	81%	100%	74%	---	94%	89%	100%	82%	---
3 Complete Review of All Screens	100%	83%	0%	N / A	---	99%	90%	0%	N / A	---
4 Complete Supplemental Review (if needed)	N / A	N / A	100%	N / A	---	N / A	N / A	100%	N / A	---
5 Complete Standard Process Initial Review	N / A	N / A	N / A	75%	---	N / A	N / A	N / A	59%	---
6 Send Follow-on Studies Cost/Agreement	N / A	N / A	N / A	38%	---	N / A	N / A	N / A	47%	---
7 Complete Impact Study (if needed)	N / A	N / A	N / A	25%	---	N / A	N / A	N / A	18%	---
8 Complete Detailed Study (if needed)	N / A	N / A	N / A	---	---	N / A	N / A	N / A	---	---
9 Send Executable Agreement	DONE	69%	100%	50%	---	DONE	84%	100%	62%	---
10 Total Maximum Days	96%	72%	100%	58%	---	95%	86%	100%	45%	---

The days reported in Table 3 are from the perspective of the utility and not the applicant. The date math does not take into account the number of days it takes for processes outside the Distribution Companies' control. Therefore, from the perspective of the applicant some projects take more than the time suggested in the Interconnection Tariff to complete. Table 8 compares the total time it takes for the Distribution Company to review the application to the total elapsed time from the applicant perspective. The Distribution Company perspective omits days that are outside of its control, while the applicant perspective includes all business days from the day the application was received to the day the applicant is notified they can install equipment or they are sent the Interconnection Agreement.

Table 8. A comparison of the number of business days it takes to complete the interconnection process from the Distribution Company (Table 3) and applicant perspectives.

	Simplified	Expedited	Standard
Distribution Company Perspective (repeated from Table 3)	2.3 days	36 days	80 days
Applicant Perspective	4.9 days	45 days	99 days

In general, the Simplified Process applicants went through the process fastest and encountered lowest percentage of delays attributed to incomplete applications. Factors that may have caused delays in the other processes were usually not observed in the Simplified Process because of the shorter application form and absence of an application fee. This is illustrated by the higher percentage of applications that were complete when initially received for the Simplified Process (219 of 238, 92%) compared to applications submitted in the Expedited or Standard Process (47 of 87, 52%). The reasons that incomplete applications were received include:

- application fee not enclosed for Expedited and Standard Process applications
- missing detailed drawings
- missing location information
- type of equipment not specified
- lack of relay and/or setting information
- designs changed after application initially submitted

This issue of incomplete applications was addressed in the June 2005 DG Collaborative's report and several improvements have been included in the revised tariff, D.T.E 02-38-C. Because the new tariff became effective on February 1, 2006 and the final reporting period ended March 31, 2006, there is not enough data to determine if there has been a significant reduction in the number of incomplete applications.

The timelines for the Simplified Process appear to be working well as nearly all applications receive approval within the specified timeframe. In the Simplified Process the distribution companies evaluate the applications based on three screening criteria. These criteria are:

1. Is the Point of Common Coupling on a radial distribution system?
2. Is the aggregate generating Facility on the circuit less than 7.5% of circuit annual peak load?
3. Does the Facility use a Qualified Inverter (UL 1741) with a Power Rating of 10 kW or less?

Two hundred thirty-six of the 238 applications identified as in the Simplified Process passed these screening criteria.² When these screening criteria were successfully passed, the application was returned to the applicant, permitting them to install the DG. On average, applicants were permitted to install the DG within 3 business days of the utility receiving the Simplified Process application.

Data collected to date for the Expedited and Standard Processes also show that timelines are generally met. However, there are still a relatively large number of Expedited and Standard Process projects that are in the Interconnection Process making it difficult to assess the appropriateness of the timelines.

Interconnection Fees and Costs

The application fees and the costs for reviewing the applications are also tracked in the data tracking spreadsheet. Fees of \$3 per kW with a minimum of \$300 and maximum of \$2500 are collected in the Expedited and Standard Processes. Except in rare circumstances, there are no application fees in the Simplified Process. Distribution Company costs for other parts of the Interconnection Process are charged at actual cost to the applicant. For the exact details, see the Interconnection Tariff.

Table 8. Aggregate fees and costs for the projects that have completed all phases of the Interconnection Process from submitting an application to Agreement, Commissioning and Testing.

	Interconnection Process	
	Fees	Costs ^{3, 4}
Simplified	\$ N/A	\$ 30,300
Expedited	\$ 7,230	\$ 17,391
Standard	\$ 25,352	\$ 26,725

Table 8 reports the total costs for the complete “Interconnection Process” for only those projects that have progressed through the entire process and where costs and fees have been reported.

² One project failed Screen 1 because it would have been interconnected to an area network. Another project failed Screen 3 because it would not have used a Qualified Inverter.

³ In the “Interconnection Process” the Distribution Companies may not have charged applicants for the witness test. The Tariff provides for cost recovery for this step in the Expedited and Standard Process.

⁴ In Q4 2005 NSTAR revised cost data for at least 55 projects. NSTAR changed the time it took to review these projects from 0.5 hour to 1.0 hour, and increased the hourly rate from \$100 to \$125. For NSTAR each Simplified Process applications required 1.0 hour and cost the utility \$125.

Table 8 includes data for 222 Simplified Process, 21 Expedited Process and 6 Standard Process projects.

Individual Distribution Company Census and Timeframe Data

The following pages provide Tables 1, 3, 4 and 5 for each Distribution Company.

Fitchburg Gas and Electric Company:

FG&E DG Application Data Tracking: Q2 2004 to Q1 2006

Type of Review				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
SIM	4	11	4	11
EXP	1	60	0	0
STD	0	0	0	0
Total	5	71	4	11

Fuel Source				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
SOLAR	5	71	4	11
WIND	0	0	0	0
HYDRO	0	0	0	0
DIESEL	0	0	0	0
NG	0	0	0	0
OIL	0	0	0	0
COAL	0	0	0	0
BIODIESEL	0	0	0	0
BIOMASS	0	0	0	0
LANDFILL G	0	0	0	0
DIGEST G	0	0	0	0
ETHANOL	0	0	0	0
OTHER	0	0	0	0

Generator Type				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
INV	5	71	4	11
IND	0	0	0	0
SYN	0	0	0	0

Prime Mover				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
PV	5	71	4	11
IC ENG	0	0	0	0
MICRO TUR	0	0	0	0
GAS TUR	0	0	0	0
FUEL CELL	0	0	0	0
WIND TUR	0	0	0	0
STEAM TUR	0	0	0	0
OTHER	0	0	0	0

Service Type				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
RADL	5	71	4	11
SPOT	0	0	0	0
AREA	0	0	0	0

Application Initially Complete?		
	Yes	No
SIM	3	1
EXP / STD	0	1

Review Fees and Costs*		
	Customer	Utility
SIM	N/A	\$ 700
EXP	\$ 180	\$ 700
STD	\$ -	\$ -

* Review Fees and Costs are only for the review of screens in the SIM and EXP Processes or the

Total Fees and Costs		
	Customer	Utility
SIM	N/A	\$ 650
EXP	\$ 180	\$ 1,600
STD	\$ -	\$ -

FG&E DG Application Data Tracking: Q2 2004 to Q1 2006

		Maximum Days Specified in Interconnection Tariff					Average Days				
		SIMPLIFIED		EXPEDITED		STANDARD	SIMPLIFIED		EXPEDITED		STANDARD
		Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited	Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
1	Acknowledge Receipt of Application	3	3	3	3	3	3.8	0.0	---	---	---
2	Review Application for Completeness	10	10	10	10	10	3.8	10.0	---	---	---
3	Complete Review of All Screens	10	25	25	N / A	25	0.0	0.0	---	N / A	---
4	Complete Supplemental Review (if needed)	N / A	N / A	20	N / A	20	N / A	N / A	---	N / A	---
5	Complete Standard Process Initial Review	N / A	N / A	N / A	20	20	N / A	N / A	N / A	---	---
6	Send Follow-on Studies Cost/Agreement	N / A	N / A	N / A	5	5	N / A	N / A	N / A	---	---
7	Complete Impact Study (if needed)	N / A	N / A	N / A	55	55	N / A	N / A	N / A	---	---
8	Complete Detailed Study (if needed)	N / A	N / A	N / A	30	30	N / A	N / A	N / A	---	---
9	Send Executable Agreement	DONE	10	10	15	15	DONE	---	---	---	---
10	Total Maximum Days	15	40	60	125	150	3.8	---	---	---	---

Attachment D – Two Years of Tracking Data through March 2006

FG&E DG Application Data Tracking: Q2 2004 to Q1 2006

		Number of Projects Meeting Timeline					Number of Projects Reaching Step				
		SIMPLIFIED	EXPEDITED		STANDARD		SIMPLIFIED	EXPEDITED		STANDARD	
		Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited	Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
1	Acknowledge Receipt of Application	3	1	0	0	0	4	1	0	0	0
2	Review Application for Completeness	3	0	0	0	0	4	1	0	0	0
3	Complete Review of All Screens	4	1	0	N / A	0	4	1	0	N / A	0
4	Complete Supplemental Review (if needed)	N / A	N / A	0	N / A	0	N / A	N / A	0	N / A	0
5	Complete Standard Process Initial Review	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
6	Send Follow-on Studies Cost/Agreement	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
7	Complete Impact Study (if needed)	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
8	Complete Detailed Study (if needed)	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
9	Send Executable Agreement	DONE	0	0	0	0	DONE	0	0	0	0
10	Total Maximum Days	4	0	0	0	0	4	0	0	0	0

FG&E DG Application Data Tracking: Q2 2004 to Q1 2006

		Kilowatts of Projects Meeting Timeline					Kilowatts of Projects Reaching Step				
		SIMPLIFIED	EXPEDITED		STANDARD		SIMPLIFIED	EXPEDITED		STANDARD	
		Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited	Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
1	Acknowledge Receipt of Application	9	60	0	0	0	11	60	0	0	0
2	Review Application for Completeness	9	0	0	0	0	11	60	0	0	0
3	Complete Review of All Screens	11	60	0	N / A	0	11	60	0	N / A	0
4	Complete Supplemental Review (if needed)	N / A	N / A	0	N / A	0	N / A	N / A	0	N / A	0
5	Complete Standard Process Initial Review	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
6	Send Follow-on Studies Cost/Agreement	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
7	Complete Impact Study (if needed)	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
8	Complete Detailed Study (if needed)	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
9	Send Executable Agreement	DONE	0	0	0	0	DONE	0	0	0	0
10	Total Maximum Days	11	0	0	0	0	11	0	0	0	0

NSTAR Electric

NSTAR DG Application Data Tracking: Q2 2004 to Q1 2006

Type of Review				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
SIM	127	345	126	343
EXP	22	3,824	15	3,432
STD	30	17,520	7	6,255
Total	179	21,689	148	10,030

Fuel Source				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
SOLAR	126	567	120	408
WIND	7	5,574	4	674
HYDRO	0	0	0	0
DIESEL	2	2,460	0	0
NG	42	12,713	24	8,948
OIL	0	0	0	0
COAL	0	0	0	0
BIODIESEL	0	0	0	0
BIOMASS	1	40	0	0
LANDFILL G	1	335	0	0
DIGEST G	0	0	0	0
ETHANOL	0	0	0	0
OTHER	0	0	0	0

Generator Type				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
INV	134	589	128	430
IND	39	12,225	19	4,350
SYN	6	8,875	1	5,250

Prime Mover				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
PV	126	567	120	408
IC ENG	44	10,294	22	3,694
MICRO TUR	0	0	0	0
GAS TUR	0	0	0	0
FUEL CELL	1	4	1	4
WIND TUR	7	5,574	4	674
STEAM TUR	1	5,250	1	5,250
OTHER	0	0	0	0

Service Type				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
RADL	178	21,687	148	10,030
SPOT	0	0	0	0
AREA	1	3	0	0

Application Initially Complete?		
	Yes	No
SIM	125	2
EXP / STD	32	20

Review Fees and Costs*		
	Customer	Utility
SIM	N/A	\$ 5,800
EXP	\$ 12,465	\$ 1,750
STD	\$ 24,065	\$ 3,450

* Review Fees and Costs are only for the review of screens in the SIM and EXP Processes or the

Total Fees and Costs		
	Customer	Utility
SIM	N/A	\$ 16,000
EXP	\$ 3,750	\$ 2,991
STD	\$ 300	\$ 725

NSTAR DG Application Data Tracking: Q2 2004 to Q1 2006

1	Acknowledge Receipt of Application
2	Review Application for Completeness
3	Complete Review of All Screens
4	Complete Supplemental Review (if needed)
5	Complete Standard Process Initial Review
6	Send Follow-on Studies Cost/Agreement
7	Complete Impact Study (if needed)
8	Complete Detailed Study (if needed)
9	Send Executable Agreement
10	Total Maximum Days

Maximum Days Specified in Interconnection Tariff				
SIMPLIFIED	EXPEDITED		STANDARD	
Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
3	3	3	3	3
10	10	10	10	10
10	25	25	N / A	25
N / A	N / A	20	N / A	20
N / A	N / A	N / A	20	20
N / A	N / A	N / A	5	5
N / A	N / A	N / A	55	55
N / A	N / A	N / A	30	30
DONE	10	10	15	15
15	40	60	125	150

Average Days				
SIMPLIFIED	EXPEDITED		STANDARD	
Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
1.2	2.2	0.0	4.0	---
1.2	8.9	0.0	9.9	---
0.3	25.8	46.0	N / A	---
N / A	N / A	0.0	N / A	---
N / A	N / A	N / A	7.4	---
N / A	N / A	N / A	#DIV/0!	---
N / A	N / A	N / A	#DIV/0!	---
N / A	N / A	N / A	0.0	---
DONE	8.8	0.0	27.6	---
1.5	35.3	46.0	58.7	---

Attachment D – Two Years of Tracking Data through March 2006

NSTAR DG Application Data Tracking: Q2 2004 to Q1 2006

		Number of Projects Meeting Timeline					Number of Projects Reaching Step				
		SIMPLIFIED	EXPEDITED		STANDARD		SIMPLIFIED	EXPEDITED		STANDARD	
		Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited	Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
1	Acknowledge Receipt of Application	121	16	1	20	0	127	22	1	28	0
2	Review Application for Completeness	123	18	1	17	0	127	22	1	25	0
3	Complete Review of All Screens	127	13	0	N / A	0	127	19	1	N / A	0
4	Complete Supplemental Review (if needed)	N / A	N / A	1	N / A	0	N / A	N / A	1	N / A	0
5	Complete Standard Process Initial Review	N / A	N / A	N / A	16	0	N / A	N / A	N / A	19	0
6	Send Follow-on Studies Cost/Agreement	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
7	Complete Impact Study (if needed)	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
8	Complete Detailed Study (if needed)	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
9	Send Executable Agreement	DONE	12	1	5	0	DONE	15	1	7	0
10	Total Maximum Days	124	10	1	5	0	127	15	1	7	0

NSTAR DG Application Data Tracking: Q2 2004 to Q1 2006

		Kilowatts of Projects Meeting Timeline					Kilowatts of Projects Reaching Step				
		SIMPLIFIED	EXPEDITED		STANDARD		SIMPLIFIED	EXPEDITED		STANDARD	
		Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited	Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
1	Acknowledge Receipt of Application	326	2,552	225	11,995	0	345	3,824	225	17,220	0
2	Review Application for Completeness	329	3,574	225	9,975	0	345	3,824	225	11,960	0
3	Complete Review of All Screens	345	3,187	0	N / A	0	345	3,677	225	N / A	0
4	Complete Supplemental Review (if needed)	N / A	N / A	225	N / A	0	N / A	N / A	225	N / A	0
5	Complete Standard Process Initial Review	N / A	N / A	N / A	8,035	0	N / A	N / A	N / A	8,245	0
6	Send Follow-on Studies Cost/Agreement	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
7	Complete Impact Study (if needed)	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
8	Complete Detailed Study (if needed)	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
9	Send Executable Agreement	DONE	3,260	225	5,520	0	DONE	3,432	225	6,255	0
10	Total Maximum Days	332	2,970	225	5,520	0	345	3,432	225	6,255	0

National Grid

NGRID DG Application Data Tracking: Q2 2004 to Q1 2006

Type of Review				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
SIM	64	211	64	211
EXP	16	635	13	568
STD	13	19,804	3	4,290
Total	93	20,649	80	5,069

Fuel Source				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
SOLAR	73	962	69	395
WIND	4	5,507	1	7
HYDRO	2	210	0	0
DIESEL	0	0	0	0
NG	13	6,721	10	4,667
OIL	0	0	0	0
COAL	0	0	0	0
BIODIESEL	2	80	0	0
BIOMASS	0	0	0	0
LANDFILL G	3	8,555	0	0
DIGEST G	0	0	0	0
ETHANOL	0	0	0	0
OTHER	0	0	0	0

Generator Type				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
INV	76	964	71	397
IND	14	3,416	6	382
SYN	7	17,655	3	4,290

Prime Mover				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
PV	73	962	69	395
IC ENG	15	9,666	8	977
MICRO TUR	0	0	0	0
GAS TUR	3	5,690	2	3,690
FUEL CELL	0	0	0	0
WIND TUR	4	5,507	1	7
STEAM TUR	0	0	0	0
OTHER	2	210	0	0

Service Type				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
RADL	97	22,035	80	5,069
SPOT	0	0	0	0
AREA	0	0	0	0

Application Initially Complete?		
	Yes	No
SIM	52	12
EXP / STD	15	14

Review Fees and Costs*		
	Customer	Utility
SIM	N/A	\$ 3,950
EXP	\$ 3,900	\$ 3,100
STD	\$ 1,800	\$ 300

* Review Fees and Costs are only for the review of screens in the SIM and EXP Processes or the

Total Fees and Costs		
	Customer	Utility
SIM	N/A	\$ 5,900
EXP	\$ 2,100	\$ 4,600
STD	\$ 14,600	\$ 18,500

NGRID DG Application Data Tracking: Q2 2004 to Q1 2006

1	Acknowledge Receipt of Application
2	Review Application for Completeness
3	Complete Review of All Screens
4	Complete Supplemental Review (if needed)
5	Complete Standard Process Initial Review
6	Send Follow-on Studies Cost/Agreement
7	Complete Impact Study (if needed)
8	Complete Detailed Study (if needed)
9	Send Executable Agreement
10	Total Maximum Days

Maximum Days Specified in Interconnection Tariff				
SIMPLIFIED	EXPEDITED		STANDARD	
Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
3	3	3	3	3
10	10	10	10	10
10	25	25	N / A	25
N / A	N / A	20	N / A	20
N / A	N / A	N / A	20	20
N / A	N / A	N / A	5	5
N / A	N / A	N / A	55	55
N / A	N / A	N / A	30	30
DONE	10	10	15	15
15	40	60	125	150

Average Days				
SIMPLIFIED	EXPEDITED		STANDARD	
Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
1.4	2.8	---	1.3	---
1.7	5.8	---	4.2	---
1.0	7.3	---	N / A	---
N / A	N / A	---	N / A	---
N / A	N / A	N / A	13.2	---
N / A	N / A	N / A	12.3	---
N / A	N / A	N / A	64.5	---
N / A	N / A	N / A	0.0	---
DONE	23.5	---	93.0	---
2.7	37.9	---	123.0	---

Attachment D – Two Years of Tracking Data through March 2006

NGRID DG Application Data Tracking: Q2 2004 to Q1 2006

		Number of Projects Meeting Timeline					Number of Projects Reaching Step				
		SIMPLIFIED	EXPEDITED		STANDARD		SIMPLIFIED	EXPEDITED		STANDARD	
		Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited	Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
1	Acknowledge Receipt of Application	54	11	0	11	0	64	16	0	13	0
2	Review Application for Completeness	62	13	0	11	0	64	16	0	13	0
3	Complete Review of All Screens	63	11	0	N / A	0	64	13	0	N / A	0
4	Complete Supplemental Review (if needed)	N / A	N / A	0	N / A	0	N / A	N / A	0	N / A	0
5	Complete Standard Process Initial Review	N / A	N / A	N / A	7	0	N / A	N / A	N / A	11	0
6	Send Follow-on Studies Cost/Agreement	N / A	N / A	N / A	3	0	N / A	N / A	N / A	8	0
7	Complete Impact Study (if needed)	N / A	N / A	N / A	1	0	N / A	N / A	N / A	4	0
8	Complete Detailed Study (if needed)	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
9	Send Executable Agreement	DONE	7	0	0	0	DONE	13	0	3	0
10	Total Maximum Days	61	9	0	1	0	64	13	0	3	0

NGRID DG Application Data Tracking: Q2 2004 to Q1 2006

		Kilowatts of Projects Meeting Timeline					Kilowatts of Projects Reaching Step				
		SIMPLIFIED	EXPEDITED		STANDARD		SIMPLIFIED	EXPEDITED		STANDARD	
		Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited	Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
1	Acknowledge Receipt of Application	181	397	0	17,514	0	211	635	0	19,804	0
2	Review Application for Completeness	198	493	0	14,114	0	211	635	0	19,804	0
3	Complete Review of All Screens	207	418	0	N / A	0	211	568	0	N / A	0
4	Complete Supplemental Review (if needed)	N / A	N / A	0	N / A	0	N / A	N / A	0	N / A	0
5	Complete Standard Process Initial Review	N / A	N / A	N / A	10,269	0	N / A	N / A	N / A	19,254	0
6	Send Follow-on Studies Cost/Agreement	N / A	N / A	N / A	8,000	0	N / A	N / A	N / A	16,960	0
7	Complete Impact Study (if needed)	N / A	N / A	N / A	2,000	0	N / A	N / A	N / A	11,365	0
8	Complete Detailed Study (if needed)	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
9	Send Executable Agreement	DONE	187	0	0	0	DONE	568	0	4,290	0
10	Total Maximum Days	194	306	0	600	0	211	568	0	4,290	0

Western Massachusetts Electric Company

WMECO DG Application Data Tracking: Q2 2004 to Q1 2006

Type of Review				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
SIM	43	120	40	112
EXP	4	166	2	120
STD	4	15561	2	4861
Total	51	15847	44	5093

Fuel Source				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
SOLAR	44	146	40	112
WIND	1	20	0	0
HYDRO	1	700	0	0
DIESEL	0	0	0	0
NG	3	10120	2	120
OIL	0	0	0	0
COAL	1	4000	1	4000
BIODIESEL	0	0	0	0
BIOMASS	0	0	0	0
LANDFILL G	0	0	0	0
DIGEST G	0	0	0	0
ETHANOL	0	0	0	0
OTHER	1	861	1	861

Generator Type				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
INV	44	146	40	112
IND	3	140	2	120
SYN	4	15561	2	4861

Prime Mover				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
PV	44	146	40	112
IC ENG	2	120	2	120
MICRO TUR	0	0	0	0
GAS TUR	1	10000	0	0
FUEL CELL	0	0	0	0
WIND TUR	1	20	0	0
STEAM TUR	2	4861	2	4861
OTHER	1	700	0	0

Service Type				
	All Applications		Approved Appl.	
	Count	kW	Count	kW
RADL	51	15847	44	5093
SPOT	0	0	0	0
AREA	0	0	0	0

Application Initially Complete?		
	Yes	No
SIM	39	4
EXP / STD	0	8

Review Fees and Costs*		
	Customer	Utility
SIM	N/A	\$ 6,200
EXP	\$ 1,200	\$ 1,500
STD	\$ 4,600	\$ 700

* Review Fees and Costs are only for the review of screens in the SIM and EXP Processes or the

Total Fees and Costs		
	Customer	Utility
SIM	N/A	\$ 7,750
EXP	\$ 1,200	\$ 8,200
STD	\$ 10,452	\$ 7,500

WMECO DG Application Data Tracking: Q2 2004 to Q1 2006

1	Acknowledge Receipt of Application
2	Review Application for Completeness
3	Complete Review of All Screens
4	Complete Supplemental Review (if needed)
5	Complete Standard Process Initial Review
6	Send Follow-on Studies Cost/Agreement
7	Complete Impact Study (if needed)
8	Complete Detailed Study (if needed)
9	Send Executable Agreement
10	Total Maximum Days

Maximum Days Specified in Interconnection Tariff				
SIMPLIFIED	EXPEDITED		STANDARD	
Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
3	3	3	3	3
10	10	10	10	10
10	25	25	N / A	25
N / A	N / A	20	N / A	20
N / A	N / A	N / A	20	20
N / A	N / A	N / A	5	5
N / A	N / A	N / A	55	55
N / A	N / A	N / A	30	30
DONE	10	10	15	15
15	40	60	125	150

Average Days				
SIMPLIFIED	EXPEDITED		STANDARD	
Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
2.6	2.8	---	0.5	---
3.7	8.3	---	5.8	---
0.2	0.0	---	N / A	---
N / A	N / A	---	N / A	---
N / A	N / A	N / A	66.0	---
N / A	N / A	N / A	---	---
N / A	N / A	N / A	---	---
N / A	N / A	N / A	0.0	---
DONE	20.0	---	13.5	---
4.2	32.5	---	90.5	---

Attachment D – Two Years of Tracking Data through March 2006

WMECO DG Application Data Tracking: Q2 2004 to Q1 2006

		Number of Projects Meeting Timeline					Number of Projects Reaching Step				
		SIMPLIFIED	EXPEDITED		STANDARD		SIMPLIFIED	EXPEDITED		STANDARD	
		Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited	Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
1	Acknowledge Receipt of Application	226	44	1	50	0	43	4	0	4	0
2	Review Application for Completeness	237	45	1	49	0	43	4	0	4	0
3	Complete Review of All Screens	238	45	1	N / A	0	40	3	0	N / A	0
4	Complete Supplemental Review (if needed)	N / A	N / A	1	N / A	0	N / A	N / A	0	N / A	0
5	Complete Standard Process Initial Review	N / A	N / A	N / A	47	0	N / A	N / A	N / A	2	0
6	Send Follow-on Studies Cost/Agreement	N / A	N / A	N / A	46	0	N / A	N / A	N / A	0	0
7	Complete Impact Study (if needed)	N / A	N / A	N / A	46	0	N / A	N / A	N / A	0	0
8	Complete Detailed Study (if needed)	N / A	N / A	N / A	46	0	N / A	N / A	N / A	0	0
9	Send Executable Agreement	DONE	43	1	47	0	DONE	2	0	2	0
10	Total Maximum Days	235	43	1	47	0	40	2	0	2	0

WMECO DG Application Data Tracking: Q2 2004 to Q1 2006

		Kilowatts of Projects Meeting Timeline					Kilowatts of Projects Reaching Step				
		SIMPLIFIED	EXPEDITED		STANDARD		SIMPLIFIED	EXPEDITED		STANDARD	
		Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited	Radial	Passes Screens	Supplemental Req'd	Standard	Standard and Expedited
1	Acknowledge Receipt of Application	84	86	0	15561	0	120	166	0	15561	0
2	Review Application for Completeness	112	106	0	14700	0	120	166	0	15561	0
3	Complete Review of All Screens	112	146	0	N / A	0	112	146	0	N / A	0
4	Complete Supplemental Review (if needed)	N / A	N / A	0	N / A	0	N / A	N / A	0	N / A	0
5	Complete Standard Process Initial Review	N / A	N / A	N / A	861	0	N / A	N / A	N / A	4861	0
6	Send Follow-on Studies Cost/Agreement	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
7	Complete Impact Study (if needed)	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
8	Complete Detailed Study (if needed)	N / A	N / A	N / A	0	0	N / A	N / A	N / A	0	0
9	Send Executable Agreement	DONE	60	0	4000	0	DONE	120	0	4861	0
10	Total Maximum Days	105	60	0	861	0	112	120	0	4861	0